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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/723,442	11/26/2003	Ernie Lin	12203-007001	5974

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EXAMINER	
TRAN, TUAN A	

ART UNIT	PAPER NUMBER
2618	

MAIL DATE	DELIVERY MODE
09/10/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/723,442	LIN ET AL.	
	Examiner	Art Unit	
	Tuan A. Tran	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 June 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,4-13 and 15-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,4,6-13 and 15-21* is/are rejected.

7)☒ Claim(s) *5* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 1, 4, 6-9, and 16-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Babitch et al. (5,930,719) in view of Brandt (4,727,535).

Regarding claims 1, 4, 7-8 and 20-21, Babitch discloses a modem comprising: a base unit 18 (See fig. 1) for coupling to a telephone line, wherein the base unit includes a transmitter 68 for analog modulation of an analog voiceband data signal received over the telephone line and transmitting the modulated signal over a wireless medium, a receiver 68 for analog demodulation of an received RF signal, and a hybrid circuit 64 for passing analog voiceband data signals between the telephone line and the transceiver (See fig. 3 and col. 2 line 65 to col. 3 line 30, col. 5 line 54 to col. 6 line 9); a remote unit (modem of a laptop computer 14 incorporated with the cordless handset 12) (See fig. 1) for communicating with the base unit 18 over the wireless medium, wherein the remote unit includes: a RF transceiver 12 for wirelessly communicating with the base unit 18 by receiving the modulated signal over the wireless medium and analog demodulation of the analog voiceband signal, receiving an original voiceband data signal from the computer 14 via wired link, generating a RF modulated signal based on the original

signal from the computer, and transmitting the RF modulated signal to the base unit 18; and an interface to a modem circuit for decoding a data stream encoded in the analog voiceband signal, wherein the modem circuit includes an echo canceller for reducing echoes on the demodulated analog voiceband data signal and a codec for decoding the analog voiceband data signal (See figs. 1-2 and col. 4 line 23 to col. 5 line 35, col. 6 lines 22-24). However, Babitch does not mention that the base unit includes: a gain control circuit for controlling a level of the analog voiceband data signals passing from the hybrid circuit to the transmitter to be substantially in a linear range of the transmitter. Brandt teaches a coupling device acting as a telephone line interface (See fig. 1) comprising a hybrid circuit 28 for passing analog voiceband data signals between the telephone line and a coupled device; and a gain control circuit 92, 94 for controlling a level of the analog voiceband data signals passing from the hybrid circuit 28 to the coupled device to be substantially in a linear range (See figs. 1-2 and col. 3 lines 50-55, col. 5 lines 36-41). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teachings of Brandt in modifying the hybrid circuit 64 as disclosed by Babitch for the advantage of maintaining circuit isolation and automatic gain control.

Claim 16 is rejected for the same reasons set forth in claims 1, 4-5, 7-8 and 20-21.

Claim 17 is rejected for the same reasons as set forth in claims 1, 4-5, 7-8 and 20-21, as method.

Regarding claim 6, Babitch & Brandt discloses as cited in claim 1. However, they do not mention that the data signal is transmitted using FSK modulation. Since FSK modulation is well known in the art; therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use FSK modulation for modulating the data signals for the advantage of expanding the capability of the system to various modulation schemes.

Regarding claim 9, Babitch & Brandt disclose as cited in claim 1. Babitch further discloses the base unit 18 includes a ring detector coupled to the telephone line for detecting a ring signal on the telephone and providing a ring indication signal to the transmitter for transmission over the wireless medium to the remote unit, and the remote unit includes a ringer emulator coupled to the receiver for receiving the ring indication signal and emulating a ring signal on a telephone interface (See col. 5 lines 2-10).

Regarding claim 18, Babitch & Brandt disclose as cited in claim 17. Babitch further discloses the base unit 18 passes the voiceband signals between the telephone line and the remote unit without performing echo cancellation on the voiceband signals (See fig. 3 and col. 5 line 54 to col. 6 line 9).

Regarding claim 19, Babitch & Brandt disclose as cited in claim 17. Brandt further discloses the base unit introduces at least some echoes into analog voiceband data signals sent to the remote unit (See col. 5 lines 49-60).

2. Claims 10-13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Babitch et al. (5,930,719) in view of Brandt (4,727,535) as applied to claim 1 above, and further in view of Sainton (5,367,563).

Regarding claims 10-13 and 15, Babitch & Brandt disclose as cited in claim 7. However, they do not mention that the remote unit includes a switch for selecting a type of medium (wireless or wired) over which to transmit and receive the data signal, wherein the switch is triggered to operate in wireless or wired mode based on a detection of a line present indicator. Sainton teaches a modem of a computer (See figs. 1A-1B) capable of transmit/receive data signals over wireless/wired mediums comprising a switch for selecting a type of medium (wireless or wired) over which to transmit and receive the data signal, wherein the switch is triggered to operate in wireless or wired mode based on a detection of a line present indicator (See figs. 3, 5 and col. 8 line 65 to col. 9 line 13). Since both Babitch & Brandt and Sainton teach about the modem of the computer; therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teachings of Sainton in modifying the remote unit as disclosed by Babitch & Brandt for the advantage of expanding the capability of the system to various types of communication protocols.

Allowable Subject Matter

3. Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claim 5, Babitch and Brandt disclose as cited in claim 4. However, they do not mention that the gain control circuit uses a dial tone of a telephone connection or a DC current of a telephone loop to set a gain level for the original signal at a beginning of communication, the gain level remaining substantially constant during communication as specified in claim 5.

Response to Arguments

Applicant's arguments, see Remark (page 7-8), filed 06/22/2007, with respect to the rejection(s) of claim(s) 1, 4-13 and 15--21 have been fully considered and are partially persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made.

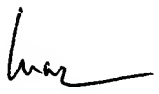
The applicant argued that Brandt doe not control the gain of the "original" signal output from the telephone network (See Remark, page 8). The examiner respectfully disagrees with the applicant. In this instant case, Brandt does show, as well as agreed by the applicant (See Remark, page 7-8) the gain control circuit 92, 94 for controlling a level of the analog voiceband data signals or AC information signal ("original signal") passing from the hybrid circuit 28 to the coupled device to be substantially in a linear range (See figs. 1-2 and col. 3 lines 50-55, col. 5 lines 36-41).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan A. Tran whose telephone number is (571) 272-7858. The examiner can normally be reached on Mon-Fri, 10:00AM-6:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Anderson can be reached on (571) 272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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